UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOVEMBER 29, 2001

OFFICE OF
ENVIRONMENTAL INFORMATION

Clyde D. Gillespie
Senior Environmental Engineer
Fairbanks Gold Mining, Inc.
#1 Fort Know Road
Fairbanks, AK 99707-3726

Dear Mr. Gillespie:

This letter responds to your October 2, 2001, letter requesting guidance regarding the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). In your letter you state that the Fort Knox Mine submitted revised Form Rs for reporting years 1998, 1999 and 2000. Specifically, you are requesting guidance on the methods used by your facility for determining threshold and release quantities of EPCRA section 313 chemicals that were reported on the revised Form Rs.

As you correctly indicate in your letter, the manufacturing activity threshold must be considered for toxic chemicals manufactured during the detoxification process. The regulatory definition of "manufacture" expressly states that "[m]anufacture also applies to a toxic chemical that is produced coincidentally during the manufacture, processing, use, or disposal of another chemical or mixture of chemicals, . . ." (40 CFR section 372.3) Accordingly, you must consider the nitrate compounds and ammonia manufactured during the INCO process toward the facility's manufacturing threshold determination.

Based on the information provided in your letter, you appropriately reported releases of toxic chemicals to the tailing impoundment. When the final disposition of a toxic chemical is a tailing impoundment, that toxic chemical should be considered released. You should note that any chemical reactions that occur after the chemical is released should not be factored into your release calculations. For example, if a quantity of cyanide is released to the tailings impoundment, you should not consider the detoxification reaction that continues after the cyanide has been released when determining release quantities. As you correctly show in your letter, any toxic chemicals drawn out of the impoundment and reclaimed back to the mill may not have to be considered released because they continue to be part of the milling process. Therefore, the mass balance method may be the best approach for determining releases to the tailing impoundment.

The methods used to calculate release quantities of nitrate compounds and ammonia appear to be correct. You should remember, however, that any releases from the volatilization of ammonia during any process at your facility, including the detoxification process, should be considered a release and reported in Sections 5 and 8 of the Form R. Based on the calculations provided in your letter, the alternate method for calculating releases of cyanide compounds is not correct. You must report the weight of the entire compound, not just the cyanide ion portion, when calculating release quantities of cyanide compounds. Only when reporting releases of metal and/or nitrate compounds should you report only a partial weight of the compound. (*See* p. 22 of the 2000 Toxic Chemical Release Inventory Reporting Forms and Instructions (EPA 745-B-01-001, February 2001)) Please remember that when calculating threshold quantities for any chemical compound, including metal and nitrate compounds, you must consider the entire weight of the compound.

You ask in your letter if toxic chemicals contained in schist need to be reported if a threshold is exceeded for those toxic chemicals. Specifically, you want to know if the schist is eligible for the overburden exemption. For EPCRA section 313 reporting purposes, overburden means the unconsolidated material that overlies a deposit of useful materials or ores. It does not include any portion of ore or waste rock. (See 40 CFR Section 372.3) Because the mantle of schist is not considered unconsolidated rock it does not meet the EPCRA section 313 definition of overburden. Once a threshold for a toxic chemical is exceeded, you must report releases and waste management activities for all non exempt quantities of that toxic chemical.

I hope this information is helpful to you in understanding the reporting requirements of section 313 of EPCRA. If you have any other questions, or desire further information, please call Marc Edmonds, of my staff, at 202.260.0616.

Sincerely,

Maria J. Doa, Ph.D., Director
Toxics Release Inventory Program Division